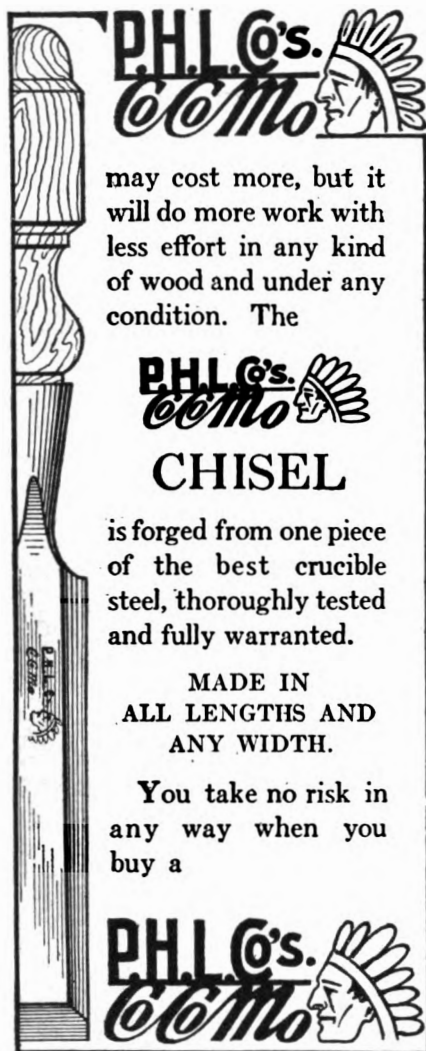




may cost more, but it will do more work with less effort in any kind of wood and under any condition. The

**P.H.L. Co's.
Cocomo**

CHISEL

is forged from one piece of the best crucible steel, thoroughly tested and fully warranted.

MADE IN
ALL LENGTHS AND
ANY WIDTH.

You take no risk in any way when you buy a

**P.H.L. Co's.
Cocomo**



chisels
could look the same and cost half as much. It's what you don't see that makes the cost and gives the service.

P. H. LEARNER CO.

—INC.—

Factory: KOKOMO, IND.

SALES DEPARTMENT

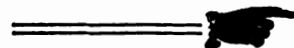
108 W. Lake St., Chicago, U. S. A.

THIS CHISEL IS
RIGHT FROM
TIP TO EDGE

P.H.L. Co's.
Como 

CHISEL

fits the hand just
right. No matter
what price you pay
you can't get a bet-
ter Chisel than



IT IS
THE CHISEL OF
SERVICE.

The best that will
and skill can produce
is in the edge of the

P.H.L. Co's.
Como 

Looking
at a

P.H.L. Co's.
Como 

chisel
in any way
it is the
best.

P. H. LEARNER CO.
—INC.—

Factory: KOKOMO, IND.

SALES DEPARTMENT
108 W. Lake St., Chicago, U. S. A.

THE MAN THAT MAKES THEM SAYS:

The *P.H.L.'s Commo* chisel is sold under the positive guarantee that it will do more work than any other chisel.

It is not made by chance, but by a thorough scientific process.

It could look the same and cost half as much. It's what you don't see in my chisel that makes the cost—and gives the service.

I insist on every user being a satisfied user.

P.H. Learner

MR. TOOL USER:

If you want information about the best chisel made, have your dealer write the maker.

The P. H. Learner Co. Factory KOKOMO, IND.

108 W. Lake St., Chicago

RELATIVE TO THE COCOMO CHISEL.

In any line of manufacture the competitors at the bottom are always numerous. As the quality ladder is climbed, the competition gets less and less. The P. H. Learner Company of Kokomo, Ind., claim that they have very little competition in the matter of high grade chisels. It is an axiom that "No product can be better than the responsible head of the manufacturing concern." No one who has ever come in contact with Mr. P. H. Learner can doubt his ability to produce a chisel of merit. Coming from good thorough-going German stock, with a natural aptitude for the handling of steel, and having given a persistent study and application to the securing of the best results, he is equipped in a peculiarly efficient way for obtaining results in this line of endeavor. In conversation with Mr. Learner we learn that he emphasizes the excellence of their chisel from the tip to the edge. They claim that they spare no expense in the matter of securing the best crucible steel of special analysis, most experienced workmen and most approved processes. They emphasize the fact of the proper temper, neither too hard nor too soft, and the special shape of the blade. They are proud of their pattern of handle, which is shaped so as to give the maximum amount of comfort to the user. They also claim that the pattern and special grinding given to their beveled chisels, gives a lightness in the hands of the mechanic without affecting the strength of the chisel. Mr. Learner states that he can make a chisel for half the price that would look the same. He claims that it is what one can't see in his chisel that makes it so good.

An excursion through the Learner plant is of considerable interest. On its journey to a Cocomo chisel the bar steel is first taken to the shears and clipped in lengths of 2 feet each. These pieces are then placed in a forge and heated. The one end is then formed so as to receive the socket, if it is to be a socket chisel, or shaped into a tang if for a tang chisel. The socket is made of seamless steel tubing formed in a cone shape so as to telescope over the especially shaped neck of the steel bar. This embryo chisel is then returned to the furnace, heated to a welding temperature and is thoroughly welded together, after which the shear is again used, leaving a sufficient amount of steel which with the socket will make a tool of the proper length when it is turned out. A careful inspection is then made in regard to the welding.

In department 2 the tool is taken through another set of dies which forms the piece of steel into the proper shape and length. This process is technically known as plating. The smoothing operation is given by the socket being passed through another set of dies after it is heated. At this point the tool is brought to another shearer and clipped to the exact length. This is followed by straightening and a careful inspection. The chisel is then heated to the proper temperature and hardened in oil and after this given a lead bath. By means of a pyrometer this lead bath is kept at the proper degree of temperature so as to give the steel the proper temper. The pyrometer is infallible, so that it is impossible for the temper to be either too hard or too soft. At this stage every chisel is thoroughly and fully tested and then inspected with the greatest of care.

In department 3 the chisels are ground by experienced men on fine grain Huron grindstones. From there they travel to the edging machines and are properly edged so as to be sure and have every one of the proper width. They then pass back to another set of grindstones and have the cutting bevel put on them. Before being allowed to pass through the special beveling process they are again inspected and tested.

In department No. 4 the socket or tang is ground, when after another inspection they are passed into the polishing room where the polisher passes them over four grades of emery wheels. They are then returned to the grinding room where they are sharpened and where another test and most rigid inspection is given.

In department 5 they go into the hands of the polisher, where they are finished by being passed over three finer wheels.

On arriving in the stock room they are given their final examination. If the chisel passes this inspection it is oiled with pure olive oil, handled and then given its name, as an emblem of high degree, after which it is carefully polished with a soft woolen cloth and air slacked lime. After being polished the steel is never touched by the hand. It is packed in anti-rust paper and boxed for shipment.